

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES



Ex parte LARRY E. SPENCER

Appeal No. 2006-2850
Application No. 10/812,027
Technology Center 3600

ON BRIEF

Before CRAWFORD, NAPPI and FETTING, **Administrative Patent Judges.**

NAPPI, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. §134(a) of the final rejection of claims 1, 3, 5 through 31 and 33 through 44. For the reasons stated *infra* we affirm-in-part the Examiner's rejection of these claims.

Invention

The invention relates to a vehicle navigation system which is transportable between vehicles. See pages 1 and 2 of Appellant's specification. Claim 1 is representative of the invention and reproduced below:

1. A vehicle navigation system comprising:
a computer module including a processor and a map database;
a docking station, said computer module selectively matable with said docking station;
wherein the computer module further includes at least one navigational sensor.

References

The references relied upon by the Examiner are:

Avitan	US 4,942,529	Jul. 17, 1990
Ito	US 5,889,337	Mar. 30, 1999
Kamiya	US 5,917,435	Jun. 29, 1999
Hollenberg	US 6,091,956	Jul. 18, 2000
Kodama (as translated)	JP 10213443	Aug. 11, 1998

Rejection at Issue

Claims 1, 3, 5 through 17, 30, 31 and 33 through 38 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kamiya in view of Kodama and Hollenberg. The Examiner's rejections are set forth on pages 3 through 6 of the Answer. Claims 18 through 22 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kamiya in view of Kodama

and Avitan. The Examiner's rejection is set forth on pages 7 and 8 of the Answer. Claims 23 and 40 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kamiya in view of Kodama and Ito. The Examiner's rejection is set forth on page 9 of the Answer. Claims 24 through 28, 39, 41 and 44 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kamiya in view of Kodama, Ito and Avitan. The Examiner's rejection is set forth on pages 10 and 11 of the Answer. Claim 29 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kamiya in view of Kodama, Ito, Avitan and Hollenberg. The Examiner's rejection is set forth on page 11 of the Answer. Throughout the opinion we make reference to the Briefs, the Answer and the Office action mailed January 26, 2005, for the respective details thereof.

Opinion

We have considered the subject matter on appeal, the rejections advanced by the Examiner and the evidence of obviousness relied upon by the Examiner in support of the rejections. We have likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Brief along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of Appellant and the Examiner, and for the reasons stated *infra* we sustain the Examiner's rejections of claims 1, 3, 5 through 17, 23, 24, 25, 28, 30, 31, 33 through 38 and 40

through 44 under 35 U.S.C. § 103(a). However, we will not sustain the Examiner's rejections of claims 18 through 22, 26, 27, 29 and 39 under 35 U.S.C. § 103(a).

Rejection of claims 1, 3, 5 through 17, 30, 31 and 33 through 38.

Appellant argues, on page 11 of the Brief, that the combination of Kamiya, Kodama and Hollenberg fails to render obvious the claimed subject matter. Specifically, Appellant argues that Kamiya while teaching a detachable unit as part of a navigation system fails to teach that the detachable unit includes a navigation sensor or a docking station as claimed. Further, Appellant argues that the Examiner has not shown any teaching or rationale as to why one would combine Kodama with Kamiya or Hollenberg. On pages 12 through 13 of the Brief, Appellant argues that the Examiner has improperly interpreted the claim. Appellant asserts that the claim recites that the computer module is selectively matable with a docking station and includes a navigation sensor. Appellant asserts that Kodama describes a navigation sensor unit selectively mountable to a base, and the central processor is part of the base unit. Appellant concludes:

Even assuming arguendo the combination of Kodama with Kamiya, i.e., assuming a person of ordinary skill in the art would be motivated to include a removable navigation sensor according to Kodama in the system of Kamiya, the Examiner still has failed to render obvious the present claimed subject matter. A person of ordinary skill would, at most, have an additional removable component, i.e., a removable navigation sensor according to Kodama, above and beyond the detachable unit and vehicle-side unit of Kamiya. This is not the same as a computer module including a navigational sensor as claimed in claim 1.

We agree with Appellant's description of the Kodama and Kamiya references, however, we disagree with the Appellant's argument that the combination of Kodama, Kamiya and Hollenberg does not render the claimed subject matter obvious. We note that Appellant's arguments have not discussed the teachings of the Hollenberg reference. As discussed *infra* we find that Hollenberg teaches many of claimed features which Appellant assert are absent from Kodama and Kamiya. Claim 1 recites a "computer module" which includes a processor, map database and "at least one navigational sensor." Appellant's specification, on page 1, identifies that navigation sensors include GPS receivers, accelerometer, gyros, compass etc. Claim 1 further recites a "docking station, said computer module selectively matable with said docking station."

As discussed by the Examiner and Appellant, Kamiya teaches a vehicle navigation system, which makes use of a processor, navigation sensors, and a map database. See abstract and figures 1 and 2. Kamiya teaches several arrangements of the components, as shown in figures 1, 13, 14 and 30. There is a detachable unit with a MMECU (multi-media electronic control unit, which we consider to meet the claimed processor) and in each of these arrangements the navigational sensors are mounted on the vehicle and not in the detachable unit. Further in figure 31, Kamiya teaches that all components are mounted to the vehicle. Kamiya states that the reason that the gyro sensors (i.e. an inertial navigation sensor which is one of the two types of sensors used) are mounted on the vehicle and not the

detachable unit is that the position and inclination of the gyro must be maintained constant. See column 1, lines 50-55. Kamiya is silent as to why the Global Positioning System (GPS) sensors are not mounted in the detachable unit. Kamiya discusses using the entertainment functions of the detachable unit outside of the vehicle, but not the navigation functions, thus suggesting that they are not needed and mounting them to the vehicle reduces the size/weight of the detachable unit.

We find that Kodama teaches a method of mounting navigation sensors to a vehicle.¹ Kodama discusses moving the navigation sensors, from one vehicle to another. See paragraph 0006. Kodama teaches a system which makes use of a sensor mounting base, item 13 in figure 1, to which a GPS antenna and a self contained navigation sensor unit are mounted. See paragraph 0009. The self contained navigation sensor contains a direction sensor and an acceleration sensor (i.e. inertial navigation sensor). See paragraph 0011. Kodama teaches that a navigation device body is connected to the sensors via shielded line 14. See figures 1, 2 and paragraph 0017. Kodama also teaches that the navigation device body contains the GPS receiver (item 22), processor (item 23), storage medium with map data (item 25), and a display (item 26). See paragraph 0012 and

¹ We note that in the Reply Brief, Appellant discusses the Examiner's reliance on a machine translation of the Kodama reference. In response to the Reply Brief, on July, 21, 2005 the Examiner made of record a translation provided by Schreiber Translations, Inc. It is this translation upon which our decision relies.

figure 2. Thus, Kodama teaches that the navigation device body includes all of the elements claimed (a GPS receiver is a navigation sensor), but Kodama does not teach how the navigational sensor unit is mounted to the car. However, given the discussion of moving the system from one car to another it is clear that the unit is removable.

Hollenberg teaches a “situation information system” a system which makes use of a mobile computer which has location finding capabilities that allow a user to navigate in unfamiliar cities. See Column 5, lines 12 through 27 and column 6, lines 31 through 49. The users can mount the devices in a vehicle or carry the device to explore on foot. See column 6, lines 50 through 54. The device uses internal resources and when attached to a vehicle through a bracket, item 40, is connected to the vehicle’s resources, e.g. GPS antenna, radio frequency antenna, power supply etc. See figures 7, 8 and column 20, lines 35 through 45. We consider the bracket item 40 of Hollenberg to meet the claimed docking station. Further, as Hollenberg teaches that the portable device has a display and can be used to navigate when not attached to the vehicle, we find that Hollenberg teaches that the portable device contains a processor, map database and a navigation sensor. Thus, it appears to us that Hollenberg teaches all of the limitations of claim 1. Nonetheless the Examiner has rejected claim 1 over the combination of Kamiya, Kodama and Hollenberg.

We consider that one of skill in the art viewing Hollenberg, and Kodama would consider modifying the device of Kamiya to include a navigation sensor in the detachable unit as it would allow the user to use the

detachable unit to navigate when not in the vehicle. Accordingly, we find ample evidence of record to support the Examiner's rejection of claim 1.

On page 13 of the Brief, Appellant asserts that the Examiner's rejection of claims 3, 5 through 17, 30, 31 and 33 through 38 should be reversed for the same reasons asserted with respect to claim 1.

As discussed *supra*, Appellant's arguments directed to claim 1 have not convinced us of error in the Examiner's rejection of claim 1. Accordingly, we will sustain the Examiner's rejection of claims 3, 5 through 17, 30, 31 and 33 through 38 under 35 U.S.C. § 103 (a).

Rejection of claims 18 through 22.

On page 13 of the Brief, Appellant argues that the combination of Kamiya, Kodama and Avitan fails to render obvious the claimed subject matter. On pages 13 and 14 of the Brief, Appellant presents arguments similar to those discussed above with respect to the combination of Kamiya and Kamiya. On page 14 of the Brief, Appellant argues:

[I]n Avitan the different data is stability criteria for a number of different trucks in order to minimize the need for highly trained personnel for installation. (Avitan at column 3, lines 43-51). The Avitan system does not fairly envision installation of a computer module in a first vehicle and subsequently in a second vehicle, rather Avitan describes including vehicle data for both the first and second vehicles in two computer modules, one of the computer modules being installed in a first vehicle and the other installed in a second vehicle. As such, a person of ordinary skill would not have been motivated to combine Kamiya with Avitan

In response, the Examiner states, on page 15 of the Answer:

Kodama teaches accumulating *pre-storing* current vehicle position in an internal memory, and Kodama teaches that the navigation device including the inertial sensor and GPS receiver is removable (para 0039,0006). Kodama does not explicitly disclose utilizing first vehicle data when the navigation module is installed in the first vehicle, and utilizing second vehicle data when the navigation module is installed in the second vehicle. However, since the navigation device taught by Kodama can be installed in the first vehicle, then it can be installed in the second vehicle (para 0039,0006), using pre-stored vehicle current position of the first vehicle when the navigation device is mounted on the first vehicle in order to provide correct navigation and correct position representation on the map to first vehicle (not the position of the second vehicle where the navigation device is not in) would have been obviously within the knowledge of an ordinary person skilled in the art. Moreover, Avitan teaches storing sets of data of different vehicle in the same memory and allowing the user to select the set of data that will be used in the vehicle in which the memory is in (Avitan col.3, lines 49-56), using the suggestions from Avitan, by storing prestored current position data of different vehicles in a removable memory, and allowing the user to select appropriate set of data for use in the vehicle in which the navigation device is in would have been well within the knowledge of an ordinary person skilled in the art at the time the invention was made.

We disagree with the Examiner's rationale. Claim 18, recites a vehicle navigation system which includes a computer module including first vehicle data and second vehicle data, wherein the first vehicle data is used when the computer is the first vehicle and the second data when in the second vehicle. We do not find that the combination of Kamiya, Kodama and Avitan teach or make obvious such a system. While we concur with the Examiner that Kodama teaches a navigation system which makes use of pre-

stored information of the current position and that the device may be moved from car to car, we do not find that this would motivate the skilled artisan to store on the detachable unit, position data for two vehicles. Further, while we find that Avitan teaches a computer mounted on a vehicle which has data files for many types of vehicles, Avitan is concerned with control for a forklift and has no discussion of the data being used in conjunction with a navigation system. Thus, we disagree with the Examiner's finding that independent claim 18 is obvious over Kamiya, Kodama and Avitan. Accordingly, we will not sustain the Examiner's rejection of independent claim 18 or the claims dependent thereupon, claims 19 through 22.

Rejection of claims 23 and 40.

Appellant argues, on page 16 of the Brief, that the arguments directed to the rejection of claim 1 as they relate to Kamiya and Kodama also apply to the rejection of claim 23. Further, Appellant argues that Ito teaches a simplified assembly process for an instrument dashboard. Appellant concludes that none of references teaches removably securing the CPU in a second vehicle.

We are not persuaded by Appellant's arguments. Initially we note that independent claim 23 has a different scope than claim 1. Claim 23 recites:

- A method for using a vehicle navigation system including the steps of:
- a. removably securing a CPU and inertial sensor in a first vehicle;
 - b. removing the CPU and at least one inertial sensor from the first vehicle;
 - c. after step b., removably securing the CPU and the at least one inertial sensor in a second vehicle.

Unlike claim 1, claim 23 recites no limitation which requires that the CPU and navigation sensor are in the same module. Rather, claim 23 is a method claim, and recites securing the CPU and the inertial sensor. This step is broad and encompasses installing the CPU and inertial sensor as two separate modules or one. As discussed *supra*, we find that Kodama teaches that navigation system can be moved from one vehicle to another, thus, suggesting that the system is removably secured to a vehicle. As discussed *supra*, Kodama teaches that the inertial sensor is removably mounted. Thus, we find ample evidence to support the Examiner's rejection of claim 23. Appellant presents no arguments as to why claim 40 is separately patentable from claim 23, accordingly we group claim 40 with claim 23 and similarly sustain the Examiner's rejection of claim 40. See 37 C.F.R. § 41.67(c)(1)(vii).

Rejection of claim 24 through 28, 39, 41 through 44.

On page 17 of the Brief, Appellant argues that the combination of Kamiya, Kodama, Ito and Avitan do not make obvious the subject matter of claims 24 through 28, 39 and 41 through 44. Appellant argues that claims 24 through 29 depend upon claim 23 and are allowable for the reasons discussed with respect to claim 23. Appellant states "[w]ith specific reference to claims 26, 27, 39 and 41-42 the Examiner is referred to the above discussion regarding claim 22." Further, Appellant asserts that claims 43 and 44 ultimately depend upon claim 40 and are allowable for the reasons discussed with respect to claim 40.

Appellant's arguments have not persuaded us of error in the Examiner's rejection of all of the claims. As noted above, we are not persuaded of error in the Examiner's rejection of claims 23 or 40. However, as discussed above we will not sustain the Examiner's rejection of claim 18 which recites a mobile computer with first and second vehicle data wherein the module uses the first data when stored in a first vehicle and the second when installed in a second vehicle. Claims 26, 27 and 39, contain similar limitations, and therefore, we will not sustain the Examiner's rejection of claims 26, 27 and 39 for the reasons discussed with respect to claim 18.

However, claims 24, 25, and 41 through 44 do not contain limitations directed to first and second data being used when the device is mounted in a first or second vehicles. Claims 24, 25, and 41 through 44 are dependent upon either claim 23 or claim 40 and recite the steps of propagating the position of the vehicle after the CPU and inertial sensor are installed on the vehicle. Unlike claim 22 which recites propagating the position of the vehicle from the vehicle data, claims 24, 25 and 41 through 44 do not recite the source of the position information. Thus, the scope of claims 24, 25 and 41 through 44 is broad and includes propagation of position data from other sources, such as for example being propagated from the GPS receiver. We find that paragraph 0027 of Kodama, discusses that one of the first steps of finding a position of a vehicle is to receive signals from three or more satellites and calculate the current position. In context one skilled in the art would understand that this step is not performed until the system is installed in a vehicle. Thus, we find that Kodama teaches the limitations of propagating the position of the vehicle after the CPU and inertial sensor are

installed in the vehicle. Accordingly, Appellant's arguments have not convinced us of error in the Examiner's rejection of claims 24, 25 and 41 through 44.

Rejection of claim 29.

On page 17 of the Brief, Appellant argues that claim 29 is patentable for the reasons asserted with respect to claims 26 and 23 from which claim 29 depends.

We concur, and as stated *supra*, we have not sustained the Examiner's rejection of claim 26. Therefore, as claim 29 is indirectly dependent upon claim 26, we will not sustain the Examiner's rejection of claim 29 for the reasons discussed *supra* with respect to claim 26.

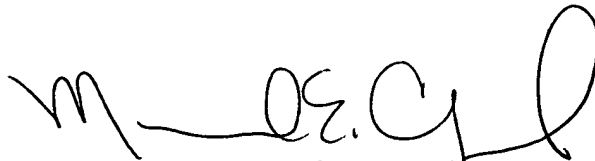
Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Brief or by filing a reply Brief have not been considered and are deemed waived by Appellant (see 37 CFR § 41.37(c)(vii)). Support for this rule has been demonstrated by our reviewing court in *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1528-1529 (Fed. Cir. 2002) wherein the Federal Circuit stated that because the Appellant did not contest the merits of the rejections in his Brief to the Federal Circuit, the issue is waived. *See also In re Watts*, 354 F.3d 1362, 1368, 69 USPQ2d 1453, 1458 (Fed. Cir. 2004).

Conclusion

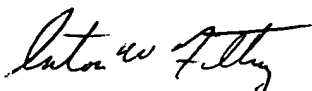
In summary, we have sustained the Examiner's rejections of claims 1, 3, 5 through 17, 23, 24, 25, 28, 30, 31, 33 through 38 and 40 through 44 under 35 U.S.C. § 103(a). However, we have not sustained the Examiner's rejections of claims 18 through 22, 26, 27, 29 and 39 under 35 U.S.C. § 103(a). The decision of the Examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART


MURRIEL E. CRAWFORD
Administrative Patent Judge


ROBERT E. NAPPI
Administrative Patent Judge


ANTON W. FETTING
Administrative Patent Judge

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LOWE, HAUPTMAN, BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA VA 22314